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NEWS	22	AUG	13	CA/CAplus enhanced with printed Chemical Abstracts
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NEWS	23	AUG	15	CAOLD to be discontinued on December 31, 2008
NEWS	24	AUG	15	CAplus currency for Korean patents enhanced
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NEWS	26	AUG	27	enhanced for more treather patent number searching CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
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				to be discontinued
NEWS	28	SEP	25	CA/CAplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of

exemplified prophetic substances

NEWS 29 SEP 26 WPIDS, WPINDEX, and WPIX coverage of Chinese and and Korean patents enhanced

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=> s compound and ester prodrug

L1 915 COMPOUND AND ESTER PRODRUG

=> s 11 and (salt)

L2 715 L1 AND (SALT)

=> s compound and (nitrogen protecting group)
L3 2525 COMPOUND AND (NITROGEN PROTECTING GROUP)

=> s 13 and carboxylic acid protecting group 3 FILES SEARCHED...

57 L3 AND CARBOXYLIC ACID PROTECTING GROUP

```
=> s 14 and (lysyl)
L5 11 L4 AND (LYSYL)
```

=> s 15 and 12

AB

L6 0 L5 AND L2

=> d 15 ti abs ibib tot

RELATED APPLN. INFO.:

L5 ANSWER 1 OF 11 USPATFULL on STN

TI Conjugates and compositions for cellular delivery

This invention features conjugates, degradable linkers, compositions, methods of synthesis, and applications thereof, including cholesterol, folate, galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HSA) derived conjugates of biologically active compounds, including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones, nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymatic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:315501 USPATFULL

TITLE: Conjugates and compositions for cellular delivery INVENTOR(S): Vargeese, Chandra, Broomfield, CO, UNITED STATES Haeberli, Peter, Berthoud, CO, UNITED STATES

Wang, Weimin, Superior, CO, UNITED STATES Chen, Tongqian, Longmont, CO, UNITED STATES

PATENT ASSIGNEE(S): Sirna Therapeutics, Inc., Boulder, CO, UNITED STATES

(U.S. corporation)

Continuation-in-part of Ser. No. US 2003-427160, filed on 30 Apr 2003, PENDING Continuation-in-part of Ser. No. WO 2002-USI5876, filed on 20 May 2002, PENDING Continuation-in-part of Ser. No. WO 2003-US5346, filed on 20 Feb 2003, PENDING

NUMBER DATE

PRIORITY	INFORMATION:	WO	2002-US15876	20020520	
		WO	2003-US5346	20030220	
		WO	2003-US5028	20030220	
		US	2001-292217P	20010518	(60)
		US	2001-306883P	20010720	(60)
		US	2001-311865P	20010813	(60)
		US	2002-362016P	20020306	(60)
		US	2002-358580P	20020220	(60)
		US	2002-363124P	20020311	(60)
		US	2002-386782P	20020606	(60)
		US	2002-406784P	20020829	(60)
		US	2002-408378P	20020905	(60)
		US	2002-409293P	20020909	(60)
		US	2003-440129P	20030115	(60)
DOCUMENT	TYPE:	Ut:	ility		

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP, 300 S. WACKER DRIVE, 32ND FLOOR, CHICAGO, IL, 60606

NUMBER OF CLAIMS:

21

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 51 Drawing Page(s)

LINE COUNT: 5782

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 11 USPATFULL on STN

Novel antiangiogenic peptides, polypeptides encoding same and methods for inhibiting angiogenesis

AB Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:178957 USPATFULL

TITLE: Novel antiangiogenic peptides, polypeptides encoding

same and methods for inhibiting angiogenesis Davidson, Donald J., Gurnee, IL, UNITED STATES INVENTOR(S):

Wang, Jieyi, Gurnee, IL, UNITED STATES

Gubbins, Earl J., Libertyville, IL, UNITED STATES

NUMBER KIND DATE ______ PATENT INFORMATION:

US 20040138127 A1 20040715 US 2004-753646 A1 20040108 (10) APPLICATION INFO.:

Continuation of Ser. No. US 1997-924287, filed on 5 Sep RELATED APPLN. INFO.: 1997, GRANTED, Pat. No. US 6699838 Continuation-in-part of Ser. No. US 1997-851350, filed on 5 May 1997, GRANTED, Pat. No. US 6057122 Continuation-in-part of

Ser. No. US 1997-832087, filed on 3 Apr 1997, GRANTED, Pat. No. US 5981484 Continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, GRANTED, Pat. No. US

5801146 DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEVEN F. WEINSTOCK, ABBOTT LABORATORIES, 100 ABBOTT PARK ROAD, DEPT. 377/AP6A, ABBOTT PARK, IL, 60064-6008

NUMBER OF CLAIMS: 68

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Page(s) LINE COUNT: 3457

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 11 USPATFULL on STN

TI Conjugates and compositions for cellular delivery

AB This invention features conjugates, degradable linkers, compositions, methods of synthesis, and applications thereof, including cholesterol, folate, galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HSA) derived conjugates of biologically active compounds, including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones, nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymatic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:144631 USPATFULL

TITLE: Conjugates and compositions for cellular delivery INVENTOR(S): Vargeese, Chandra, Broomfield, CO, UNITED STATES Haeberli, Peter, Berthoud, CO, UNITED STATES Wang, Weimin, Superior, CO, UNITED STATES Chen, Tongqian, Longmont, CO, UNITED STATES

PATENT ASSIGNEE(S): Ribozyme Pharmaceuticals, Inc. (U.S. corporation)

US 20040110296 A1 20040610 US 2003-427160 A1 20030430 (10) PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2002-US15876, filed on 20 May 2002, PENDING Continuation-in-part of Ser. No. WO 2003-US5346, filed on 20 Feb 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US5028, filed on 20 Feb 2003, PENDING

NUMBER KIND DATE

NUMBER DATE PRIORITY INFORMATION: US 2001-292217P 20010518 (60) US 2001-306883P 20010720 (60) US 2001-311865P 20010813 (60) 20020306 (60) US 2002-362016P 20020220 (60) US 2002-358580P US 2002-363124P 20020311 (60) US 2002-386782P 20020606 (60) US 2002-406784P 20020829 (60) US 2002-408378P 20020905 (60) US 2002-409293P 20020909 (60) US 2003-440129P 20030115 (60)

Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP, 300 S. WACKER

DRIVE, 32ND FLOOR, CHICAGO, IL, 60606 21

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 51 Drawing Page(s) 5686

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1.5 ANSWER 4 OF 11 USPATFULL on STN

TΙ Antiangiogenic peptides

AB Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and

compositions for inhibiting angiogenic diseases are also disclosed.

NUMBER KIND DATE

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 2004:53363 USPATFULL

TITLE: Antiangiogenic peptides

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

PATENT INFORMATION:	US 6699838 B1 20040302	
APPLICATION INFO.:	US 1997-924287 19970905 (8)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-851350, fi	.led
	on 5 May 1997, now patented, Pat. No. US 6057122	
	Continuation-in-part of Ser. No. US 1997-832087, fi	.led
	on 3 Apr 1997, now patented, Pat. No. US 5981484	
	Continuation-in-part of Ser. No. US 1996-643219, fi	.led
	on 3 May 1996, now patented, Pat. No. US 5801146	
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	

PRIMARY EXAMINER: Low, Christopher S. F.

ASSISTANT EXAMINER: Robinson, Hope A.

LEGAL REPRESENTATIVE: Casuto, Dianne, Steele, Gregory W.

NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s) 3178

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 5 OF 11 USPATFULL on STN L5

TI Conjugates and compositions for cellular delivery

AB This invention features conjugates, degradable linkers, compositions, methods of synthesis, and applications thereof, including galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HSA) derived conjugates of biologically active compounds, including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones, nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymatic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:188393 USPATFULL

TITLE: Conjugates and compositions for cellular delivery INVENTOR(S):

Vargeese, Chandra, Thornton, CO, UNITED STATES Matulic-Adamic, Jasenka, Boulder, CO, UNITED STATES Karpeisky, Alexander, Lafayette, CO, UNITED STATES

Beigelman, Leonid, Longmont, CO, UNITED STATES Blatt, Lawrence, Boulder, CO, UNITED STATES Zinnen, Shawn, Denver, CO, UNITED STATES

NUMBER KIND DATE -----PATENT INFORMATION:

US 20030130186 A1 20030710 US 2002-201394 A1 20020722 (10) APPLICATION INFO.:

NUMBER DATE PRIORITY INFORMATION: US 2001-311865P 20010813 (60)

US 2001-306883P 20010720 (60) DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER

DRIVE, SUITE 3200, CHICAGO, IL, 60606

NUMBER OF CLAIMS: 40

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 23 Drawing Page(s)

LINE COUNT:

4466 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 11 USPATFULL on STN

ΤI Modified plasminogen related peptide fragments and their use as angiogenesis inhibitors

AB

Modified peptide fragments of plasminogen domain are provided which exhibit anti-angiogenic activity. Compositions containing these peptide fragments and methods of using these compositions to treat angiogenic dependent and associated disorders are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:79063 USPATFULL

TITLE: Modified plasminogen related peptide fragments and

their use as angiogenesis inhibitors

INVENTOR(S): Ji, Weidong-Richard, Philadelphia, PA, UNITED STATES

Meyers, Chester A., Medford, NJ, UNITED STATES Natarajan, Sesha I., Hillsborough, NJ, UNITED STATES

Trail, Pamela A., Madison, CT, UNITED STATES

NUMBER KIND DATE ______ US 20030054988 A1 20030320 PATENT INFORMATION: APPLICATION INFO.: US 2001-999457 A1 20011031 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-245384P 20001102 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT

DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000 NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1 LINE COUNT: 557

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 11 USPATFULL on STN

TΙ Antiangiogenic peptides and methods for inhibiting angiogenesis

AB Mammalian kringle 5 fragments are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:97890 USPATFULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 6251867 B1 20010626 APPLICATION INFO.: US 1998-132154 19980811 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-132154, filed on 11

Aug 1998 And Ser. No. US 1997-832087, filed on 3 Apr 1997 Continuation-in-part of Ser. No. US 1996-643219.

filed on 3 May 1996, now patented, Pat. No. US 5801146 DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Hendricks, Keith D. ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s) 2101

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 11 USPATFULL on STN

TI Antiangiogenic peptides polynucleotides encoding same and methods for inhibiting angiogenesis

Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:53906 USPATFULL

TITLE: Antiangiogenic peptides polynucleotides encoding same

and methods for inhibiting angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 6057122 20000502 US 1997-851350 19970505 (8) APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-832087, filed on 3 Apr 1997 which is a continuation-in-part of Ser.

No. US 1996-643219, filed on 3 May 1996, now patented,

Pat. No. US 5801146

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Wax, Robert A. ASSISTANT EXAMINER: Wax, Robert ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 10 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 3215

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 11 USPATFULL on STN

TΙ Antiangiogenic peptides and methods for inhibiting angiogenesis

AB Mammalian kringle 5 peptide fragments are disclosed for treating angiogenic diseases Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:141891 USPATFULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5981484 19991109 APPLICATION INFO.: US 1997-832087 19970403 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-643219, filed

on 3 May 1996, now patented, Pat. No. US 5801146

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

FILE SEGMENT: Granted
PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Stole, Einar
LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 2474

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 11 USPATFULL on STN

Antiangiogenic peptides and methods for inhibiting angiogenesis

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:132781 USPATFULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5972896 19991026

APPLICATION INFO.: US 1998-131995 19980811 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-832087, filed on 3 Apr

1997 which is a continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, now patented, Pat.

No. US 5801146 DOCUMENT TYPE: Utility Granted

FILE SEGMENT: PRIMARY EXAMINER: Wax, Robert A. ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 2444

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 11 OF 11 WPIDS COPYRIGHT 2008 THOMSON REUTERS on STN L5 Novel kringle 5 peptide compound or kringle 5 fusion protein,

ΤI useful for inhibiting angiogenesis and thus for treating cancer, arthritis, macular degeneration and diabetic retinopathy

AN 2004-552394 [53] WPIDS

CR 1997-558670; 2000-349573; 2004-224006

AB US 20040138127 A1 UPAB: 20050706

NOVELTY - A kringle 5 peptide compound or kringle 5 fusion protein (I) which comprises amino acid residues 1-197 corresponding to sequence comprising amino acids 334-530 of a fully defined human plasminogen molecule (including its kringle 5 region) sequence (S1) of 791 amino acids as given in specification, and 1-12 amino acid residues corresponding to sequence from amino acid position 535-546 of (S1), is

new. DETAILED DESCRIPTION - A compound having the formula:

(a) A-B-C-X-Y (F1) or its salt, ester or prodrug, where A is absent or a nitrogen protecting group; Y is absent

or a carboxylic acid protecting

group; B is absent or is 1-197 naturally occurring amino acid residues corresponding to sequence from amino acid position 334-530 of (S1); C is R1-R2-R3-R4, where R1 is lysyl; R2 is leucyl or arginv1; R3 is tyrosyl, 3-I-tyrosyl or phenylalanyl; R4 is aspartyl; and X is absent or is 1-12 naturally occurring amino acid residues corresponding

to the sequence from amino acid position 535-546 of (S1) and their homologs or analogs; or (b) A-B1-C1-X1-Y (F2) or its salt, ester or prodrug, where A and Y are as described above; B1 is absent or is 1-176 naturally occurring amino

acid residues corresponding to the sequence from amino acid position 334-513 of (S1); C1 is the sequence from 514-523 amino acid position of (S1); and X1 is absent or is 1-10 naturally occurring amino acid residues corresponding to the sequence from amino acid position 524-533 of (S1) and their homologs or analogs.

The kringle 5 peptide fragment has substantially sequence homology to a plasminogen fragment chosen from human, murine, bovine, Rhesus monkey and porcine plasminogen.

INDEPENDENT CLAIMS are also included for the following:

- a composition (C1) comprising a mammalian isolated single or double-stranded polynucleotide sequence (II) that encodes a kringle 5 peptide fragment or kringle 5 fusion protein having angiogenesis inhibiting activity;
- (2) a composition (C2) comprising a kringle 5 peptide fragment or kringle 5 fusion protein and an excipient;
 - (3) (II) as described above;
 - (4) a vector (III) comprising (II);
- (5) implanting into a human or non-human animal a cell containing a vector, where the vector contains (II) and where the vector is capable of expressing the kringle 5 peptide fragment or kringle 5 fusion protein when present in the cell;
- (6) making a kringle 5 peptide fragment involves exposing a mammalian plasminogen to elastase at a ratio of 1:100-1:300 to form a mixture of the plasminogen of the elastase, incubating the mixture, and isolating the kringle 5 from the mixture; and
- (7) making a soluble kringle 5 peptide fragment or kringle 5 fusion protein involves isolating a polynucleotide which encodes the kringle 5 peptide fragment, cloning the polynucleotide into an expression vector, transforming the vector into a suitable host cell, and growing the host cell under conditions suitable for the expression of the soluble kringle 5 peptide fragment or kringle 5 fusion protein.

ACTIVITY - Cytostatic; Antiarthritic; Ophthalmological; Antipsoriatic; Antidiabetic; Antirheumatic; Antiinflammatory; Antiatherosclerotic; Dermatological; Vulnerary; Contraceptive.

MECHANISM OF ACTION - Angiogenesis inhibitor; Endothelial cell proliferation inhibitor; Ovulation inhibitor. The effect of kringle 5 peptide fragments on endothelial cell proliferation was determined in vitro using endothelial cell proliferation was assay. Kringle 5 peptide fragments were prepared and tested at various concentrations ranging from 100-1000 pm with basic fibroblast growth factor. The kringle 5 peptide fragment was effective at inhibiting bovine capillary (adrenal) endothelial cell (BCE) proliferation in a dose-dependent manner. The concentration of kringle 5 peptide fragment required to reach 50% inhibition (ED50) was determined at about 300 pM. In contrast, the ED50 of kringles 1-4 was shown to be 135 nM. The kringle 3 peptide fragment was least effective at inhibiting BCE cell proliferation (ED50 = 460 nM), followed by the kringle 1 peptide fragment (ED50 = 320 nM), kringle 1-4 peptide fragments (ED50 = 75 nM) and kringles 1-3 peptide fragments was the most effective at inhibiting BCE cell proliferation with an ED50 of 0.3.

USE - (I) (more preferably, human kringle 5 peptide fragment or kringle 5 fusion protein) is useful for treating a disease in a patient in need of antiangiogenesis therapy, preferably for treating cancer, arthritis, macular degeneration and diabetic retinopathy, more preferably cancer, metastatic solid tumors, carcinomas, sarcomas, lymphomas, psoriasis and hemangiomas (claimed). (I) is useful for treating primary and metastatic solid tumors and carcinomas of the breast, colon, rectum, lung, etc., and for prophylaxis of autoimmune diseases such as rheumatoid arthritis, retrolental fibroplasias, abnormal neovascularization conditions of the eye, Osler-Webber syndrome, myocardial angiogenesis; diseases characterized by abnormal stimulation of endothelia cells such as Crohn's disease, atherosclerosis, scleroderma and hypertrophic scars (that is keloids). (I) is also useful as a birth control agent which inhibits ovulation and establishment of the placenta. (I) is useful for preventing

metastasis from tumors. (I) is useful as agonist or antagonist active at kringle 5 binding site, as antigens for developing specific antisera, as peptides for use in diagnostic kits, and as peptides linked to or used in combination with cytotoxic agents for targeted killing of cells that bind kringle 5 peptide fragments. (I) is also useful for isolating kringle 5 receptor. (III) is useful in gene therapy techniques for treating the

above mentioned conditions.
ACCESSION NUMBER: 2004-552394 [53] WPIDS

CROSS REFERENCE: 1997-558670; 2000-349573; 2004-224006

DOC. NO. CPI: C2004-208850 [56]

TITLE: Novel kringle 5 peptide compound or kringle 5

fusion protein, useful for inhibiting angiogenesis and

thus for treating cancer, arthritis, macular degeneration

and diabetic retinopathy

DERWENT CLASS: A96; B04; D16

INVENTOR: DAVIDSON D J; GUBBINS E J; WANG J

PATENT ASSIGNEE: (DAVI-I) DAVIDSON D J; (GUBB-I) GUBBINS E J; (WANG-I)

COUNTRY COUNT: WANG J

PATENT INFO ABBR.:

PATENT NO KIND DATE WEEK LA PG MAIN IPC
US 20040138127 A1 20040715 (200453)* EN 53[7]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040138127		US 1996-643219	
US 20040138127		US 1997-832087	
US 20040138127		US 1997-851350	19970505
US 20040138127	Al Cont of	US 1997-924287	19970905
US 20040138127	A1	US 2004-753646	20040108

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 200401 US 200401 US 200401 US 200401	38127 A1 CIP of 38127 A1 CIP of	US 5801146 A US 5981484 A US 6057122 A US 6699838 B
PRIORITY APPLN.	INFO: US 2004-753646 US 1996-643219 US 1997-832087 US 1997-851350 US 1997-924287	20040108 19960503 19970403 19970505 19970905

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(FILE 'HOME' ENTERED AT 15:17:07 ON 27 SEP 2008)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, HCAPLUS' ENTERED AT 15:17:33 ON 27 SEP 2008

915 S COMPOUND AND ESTER PRODRUG

L2 715 S L1 AND (SALT)

L3 2525 S COMPOUND AND (NITROGEN PROTECTING GROUP)

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L 4
           57 S L3 AND CARBOXYLIC ACID PROTECTING GROUP
L5
            11 S L4 AND (LYSYL)
```

1.6 0 S L5 AND L2

=> s (lysyl-leucyl-tyrosyl-aspartyl) 6 (LYSYL-LEUCYL-TYROSYL-ASPARTYL)

=> d 17 ti abs ibib tot

ANSWER 1 OF 6 USPATFULL on STN

ΤI Novel antiangiogenic peptides, polypeptides encoding same and methods for inhibiting angiogenesis

AB Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:178957 USPATFULL

TITLE: Novel antiangiogenic peptides, polypeptides encoding

same and methods for inhibiting angiogenesis Davidson, Donald J., Gurnee, IL, UNITED STATES INVENTOR(S):

Wang, Jievi, Gurnee, IL, UNITED STATES Gubbins, Earl J., Libertyville, IL, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

US 20040138127 A1 20040715 US 2004-753646 A1 20040108 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-924287, filed on 5 Sep 1997, GRANTED, Pat. No. US 6699838 Continuation-in-part of Ser. No. US 1997-851350, filed on 5 May 1997,

GRANTED, Pat. No. US 6057122 Continuation-in-part of Ser. No. US 1997-832087, filed on 3 Apr 1997, GRANTED, Pat. No. US 5981484 Continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, GRANTED, Pat. No. US

5801146 Utility

DOCUMENT TYPE: FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: STEVEN F. WEINSTOCK, ABBOTT LABORATORIES, 100 ABBOTT PARK ROAD, DEPT. 377/AP6A, ABBOTT PARK, IL, 60064-6008

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

LINE COUNT: 3457

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1.7 ANSWER 2 OF 6 USPATFULL on STN

TI Antiangiogenic peptides

AB Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and

compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 2004:53363 USPATFULL

TITLE: Antiangiogenic peptides

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6699838 B1 20040302 APPLICATION INFO.: US 1997-924287 19970905

19970905 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-851350, filed on 5 May 1997, now patented, Pat. No. US 6057122 Continuation-in-part of Ser. No. US 1997-832087, filed

on 3 Apr 1997, now patented, Pat. No. US 5981484 Continuation-in-part of Ser. No. US 1996-643219, filed

on 3 May 1996, now patented, Pat. No. US 5801146

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Low, Christopher S. F. ASSISTANT EXAMINER:

Robinson, Hope A.

LEGAL REPRESENTATIVE: Casuto, Dianne, Steele, Gregory W.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 3178 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 6 USPATFULL on STN

ΤI Antiangiogenic peptides and methods for inhibiting angiogenesis

AB Mammalian kringle 5 fragments are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:97890 USPATEULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis INVENTOR(S):

Davidson, Donald J., Gurnee, IL, United States PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6251867 B1 20010626 APPLICATION INFO.: US 1998-132154 19980811 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-132154, filed on 11 Aug 1998 And Ser. No. US 1997-832087, filed on 3 Apr 1997 Continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, now patented, Pat. No. US 5801146

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Hendricks, Keith D.

ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 2101

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 4 OF 6 USPATFULL on STN

TI Antiangiogenic peptides polynucleotides encoding same and methods for inhibiting angiogenesis

Mammalian kringle 5 fragments and kringle 5 fusion proteins are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ACCESSION NUMBER: 2000:53906 USPATFULL TITLE: Antiangiogenic peptides polynucleotides encoding same

and methods for inhibiting angiogenesis

Davidson, Donald J., Gurnee, IL, United States INVENTOR(S):

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE 20000502 PATENT INFORMATION:

US 6057122 US 1997-851350 APPLICATION INFO.: 19970505 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-832087, filed on 3 Apr 1997 which is a continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, now patented,

Pat. No. US 5801146 Utility Granted

FILE SEGMENT: PRIMARY EXAMINER: Wax, Robert A. ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

DOCUMENT TYPE:

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 11 Drawing Page(s)

3215 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 5 OF 6 USPATFULL on STN

Antiangiogenic peptides and methods for inhibiting angiogenesis

AB Mammalian kringle 5 peptide fragments are disclosed for treating angiogenic diseases Methods and compositions for inhibiting angiogenic diseases are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 1999:141891 USPATFULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5981484 19991109 APPLICATION INFO.: US 1997-832087 19970403 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-643219, filed on 3 May 1996, now patented, Pat. No. US 5801146

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Stole, Einar

LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 2474

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 6 USPATFULL on STN

TT Antiangiogenic peptides and methods for inhibiting angiogenesis

Mammalian kringle 5 fragments are disclosed as a compounds for treating angiogenic diseases. Methods and compositions for inhibiting angiogenic diseases are also disclosed.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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ACCESSION NUMBER: 1999:132781 USPATFULL

TITLE: Antiangiogenic peptides and methods for inhibiting

angiogenesis

INVENTOR(S): Davidson, Donald J., Gurnee, IL, United States

PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 1998-131995 19991026 APPLICATION INFO.: 19980811 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1997-832087, filed on 3 Apr 1997 which is a continuation-in-part of Ser. No. US

1996-643219, filed on 3 May 1996, now patented, Pat. No. US 5801146

DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Wax, Robert A.

ASSISTANT EXAMINER: Stole, Einar LEGAL REPRESENTATIVE: Steele, Gregory W., Casuto, Dianne

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

LINE COUNT: 2444

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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1 DAVIDSONN/AU
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1 DAVIDSONT I/AU
1 DAVIDSONT E H/AU
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48 DAVIDSSON A/AU
1 DAVIDSSON A/AU E5 E6 E7 E8

E9 E10 E11

E12 1 DAVIDSSON A A/AU

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E5 E6

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1 WANGA J/AU
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E10 E11 E12